IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

M. Clark Dale et al.

Serial No.: 10/056,063 Group Art Unit 1651

Filed: January 28, 2002 Examiner: Herbert J. Lilling

For: HIGH SPEED, CONSECUTIVE BATCH OR CONTINUOUS, LOW EFFLUENT PROCESS FOR THE PRODUCTION OF ETHANOL FROM MOLASSES, STARCHES, OR SUGARS

8/B
M.G.J
12/4/02

AMENDMENT UNDER RULE 111

Commissioner of Patents
Washington, D.C. 20231

Dear Sir:

Responsive to the Office Action (Paper No. 6) of July 17, 2002, kindly amend the above-identified application as follows:

Page 6, line 10, insert the following paragraphs:

--According to C. Kurtzman & J. W. Fell, "The Yeasts: A Taxonomic Study", Elsevier Press, 1998, the characteristics of *Saccharomyces cerevisae* are as follows:

Fermentative (anaerabobic conversion to ethanol)

Glucose	+
Galactose	v (variable)
Sucrose	+
Maltose	v
Lactose	-
Raffinose	+
Trehalose	-
Melibiose	v
Starch	-

Assimilation

Glucose	-
Galactose	v (variable)
Sorbose	-
Sucrose	+
Maltose	+
Cellobiose	-
Trehalose	+
Lactose	-
Melibiose	v
Raffinose	+
Melezitose	v
Inulin	-
Soluble Starch	-
D-xylose	-
L-Arabinose	-
D ribose	-
L-Rhamnose	-
D-Glusoamine	-
N Aceyl-D-glucosamine	-
Methanol	-
Ethanol	+
Glycerol	-
Erythritol	-
Ribitol	-
Glacatitol	-
D Mannitol	-
D-Glucitol	-
Methyl glucoside	v
Salicin	-
D Gluconate	v
D- Lactate	v
Succinate	v
Citrate	-
Inositol	-
Hexadecane	-
Nitrate	-
Vitamin free	-
Growth above 30C	+
Growth above 37C	v

3' Cont

Diazonium blue B reaction is negative

Strain BPSC-15 is distinguished from other known strains in so far as vegetative reproduction by multi-lateral budding is

characterized by spherical cells, with no generation of mycelia. Yeasts remain attached in clumps formed with thousands of cells per clump.

A summary of distinguishing characteristics of BPSC-15 from its parent strain is provided by the following table:

	BPSC 15	**Parent Strain**
1. Highly Flocculent	pos	pos
2. Fermentation @ 5.0 Os/Kg Osmolality	pos	neg
3. Fermentation @ 3.8 Os/Kg	pos	pos
4. Fermentation of Glucose Fructose, Sucrose to Ethanol	pos	pos
5. Long Term stability of 1-3 mm floc pellets	pos	neg
6. Long Term Stability of floc pellets in unfiltered molasses media	pos	neg

B1 Cont

Page 8 line 16, change the text of that line to read "--Figure 1. Bio-reactor for ethanol production using BPSC-15 (NRRL Y-30630) yeast.--

Page 9, amend the paragraph starting at line 3 as follows: